# Screening And Assessment of Anxiety in Cancer Patients Attending Oncology Opd Of Kamsrc.

Krishna Sahithi.J<sup>\*1</sup>, Cuddapah Gaurav Venkat<sup>2</sup>, Thota Rashmitha<sup>3</sup>, Tam Tam Bhavana<sup>4</sup>

<sup>1</sup>(Assistant Professor, Psychiatry Department, Kamineni Academy of Medical Sciences and Research Centre, India) <sup>2,3,4</sup>(Final Year MBBS student, Kamineni Academy of Medical Sciences and Research Centre, India) Corresponding Author: Krishna Sahithi.J\*

**Abstract :** Cancer being the most stressful events, anxiety is one of the most commonly diagnosed psychiatric illness. Anxiety may interfere with cancer treatment. Screening and assessment of anxiety in cancer patients is necessary for good cancer care. The main aim of this study is to screen and assess for anxiety in newly diagnosed cancer patients attending the oncology OPD at KAMSRC. Patients who gave their informed consent were recruited and screened for anxiety using the Hospital Anxiety And Depression Scale (HADS). The positively screened subjects were further assessed using Hamilton Anxiety Rating Scale (HAM-A). In the study sample age and illiteracy were the factors frequently affecting anxiety.

Keywords : Anxiety, Cancer, HADS, HAM-A

Date of Submission: 10-08-2017

Date of acceptance: 24-09-2017

# I. Introduction

Anxiety is not uncommon among people diagnosed with cancer. Stress is often a trigger for anxiety, and cancer is one of the most stressful illness that a person may experience. Patients may have feelings of anxiety and distress while being screened for a cancer, waiting for the results of tests, receiving a cancer diagnosis, being treated for cancer, or worrying that cancer will recur. Anxiety and distress may affect a patient's ability to cope with a cancer diagnosis or treatment. It may cause patients to miss check-ups or delay treatment. Anxiety may increase pain, affect sleep, and cause nausea and vomiting<sup>1</sup>. Even mild anxiety can affect the quality of life for cancer patients and their families and may need to be treated. They may also withdraw from family or other social support systems. This in turn may result in increasing stress and feelings of despair <sup>2</sup>. Routine screening for distress is internationally recommended as a necessary standard for good cancer care <sup>3</sup>. People with cancer, as well as their friends and family, can feel distress about these things at any time after a cancer diagnosis, even many years after the cancer is treated. As the cancer situation changes, they all must cope with new stressors as well as with the old, and their feelings often change, too.<sup>4</sup>

As anxiety can have profound negative effects on the functional status, quality of life, duration of hospitalization and even medical outcome of cancer patients, evaluation and treatment of these disorders are important. This study can help the patients in achieving better mental health.

# II. Aims And Objectives

• To screen for anxiety and to assess the severity of anxiety in newly diagnosed cancer patients at KAMSRC.

# III. Inclusion Criteria

- New cases diagnosed with cancer within past one month.
- Age group more than 18 years.

# **IV.** Exclusion Criteria

- Patients with other co morbid psychiatric disorders.
- patients who are on antidepressants, antipsychotics and anxiolytics.

## V. Methodology

#### Sampling technique and data collection:

This study was a cross sectional study conducted at oncology OPD at KAMSRC from July 1<sup>st</sup> to August 31<sup>st</sup> 2017. We have collected all the newly diagnosed cancer cases within the past one month of diagnosis. 87 cases were identified. Out of these, two cases did not give consent. So, data of 85 cases with informed consent was collected administering a semi structured proforma. Every patient was screened for anxiety using the HOSPITAL ANXIETY AND DEPRESSION SCALE [HADS]. Hospital anxiety and depression scale (HADS) is a useful instrument for screening depression and anxiety in clinical settings. It was developed by Zigmond and Snaith in 1983. Its purpose is to provide clinicians with an acceptable, reliable, valid and easy to use practical tool for identifying and quantifying depression and anxiety <sup>5</sup>. Patients diagnosed with anxiety were further evaluated to assess the severity using the HAMILTON ANXIETY RATING SCALE. Patients were further referred to psychiatric department for evaluation and treatment.

#### Data entry and statistical analysis:

Data collected was cleaned and edited manually. Results have been analysed and statistical analysis was done in order to know the significance of factors. A presumptive diagnosis of anxiety was based on a four point 14-item Hospital Anxiety and Depression Scale (HADS). HADS has two subscales for anxiety (seven items) and for depression (seven items). For each item, the respondents were asked to indicate which of the 4 options (rated from 3 to 0; score range, 0-42) comes closest to describing how they have been feeling in the past week. The score of 0-7 means without clinical symptoms of anxiety, 8-10 mild anxiety and 11-21 symptomatic anxiety. The spectrum of anxiety means cumulation of symptomatic plus mild anxiety. The positively screened patients were further assessed using HAM-A scale which categorized the subjects into no anxiety, mild anxiety, moderate anxiety and severe anxiety. The data collected was analyzed using R programming language. Linear regression method was used to get the p values for the variables. With the help of the Anova table, significance between the variables was found and correlation was used to find the relationship between the variables.

#### VI. Discussion And Results

Eighty five cases with a recent diagnosis of breast, cervical, esophagus, lung or post cricoid cancer have been included in the study. Twenty six (30.68%) cases were between the age group 18-40 years. Forty cases(46.59%) were between 41-60 years, eighteen(21.59%) were between 61-80 years and one(1.14%) was greater than 80 yrs. The mean age of the patients was  $59.04\pm14.34$  (range of 20-80) years. Sixty (72%) cases were females and twenty five (28%) were males. Educated and uneducated were 32 (37.6%) and 53 (62.35%) cases, respectively. Among the patients interviewed most cases were breast cancer 25 (29.25%),24(28.08%) cancer cervix and those with other cancers were 36 (42.12%). 35(40.95%)were undergoing radiotherapy, 30(35.1%) chemotherapy, 11 (12.87%)were radio and chemotherapy and 10 (11.76%) were undergoing surgery.



HADS (Anxiety Score)	No. of	Percentage
	patients	
Normal	26	30.59
Borderline	31	36.47
Abnormal	28	32.94
Total	85	100.00

Screening of the patients for anxiety using HADS-A scale, 28(32.24%) were with abnormal scale, 26 (30.59%) were normal, 31 (36.47%) were borderline.

Hamilton anxiety rating scale:					
HAM – A	No. of patients	Percentage			
No Anxiety	22	25.88			
Mild Anxiety	18	21.18			
Moderate Anxiety	31	36.47			
Severe Anxiety	14	16.47			
Total	85	100.00			

]	Hamilton	anxiety	rating	scale:

Among the screened patients for Anxiety, those with no anxiety were 22 (25.88%), those with mild anxiety were 18 (21.18%), those with moderate anxiety were 31 (36.47%) and those with severe anxiety were 14 (16.47%).

#### Age In Relation With Hads-A And Ham-A Age in relation with HADS-A:

Considering age with HADS-A, 16.67% were with abnormal scale were in 41-60yrs age, 9.52% were in 20-40 yrs, 7.14% were in 61-80 yrs, 0.00% were above 81 yrs. The P value = 0.8835759, age is not significant with HADS (Anxiety). This is quiet similar to <u>Skarstein J</u> et al study which showed that older patients and males reported less emotional distress.<sup>6</sup>

The mean duration of diagnosis of cancer of the study was found to be 18.47 days. The average of the HADS-A score was found to be 2.11 and the average of HAM-A score was found to be 1.43.



#### Age in relation with HAM-A:

Considering age with HAM-A, in severe anxiety, 9.30% were in 41-60 yrs age, 3.49% were in 18-40 and 61-80 yrs, 0.00% were above 81 yrs. In moderate anxiety, 17.44% were in 41-60 yrs age. In mild anxiety, 9.30% were in 18-40 yrs, 13.95% in 41-60 were with no anxiety. The P value= 0.3304362, here the age is significant and the correlation 0.1062036, is a positive correlation.



## Age in relation with education and the type of cancer:

Considering age with education, 31.82% of the uneducated patients were between 41 to 60 yrs. and 15.91% of the educated patients were between 20 to 40 yrs. The survey also showed that percentage of cancer patients were more in the age group of 41 to 60 years. The breast cancer patients in the age group 41 to 60 years were 16.28\%, 18 to 40 years were 8.14\%, 61 to 80 years were 4.65% and 81 years and above were 0.0%, which is similar to the European study which showed breast cancer being the most common.<sup>7</sup> The cervical cancer patients 41 to 60 years, were 12.79%, 10.47% were in 18-40 yrs, 3.49% were in 61-80 yrs and 1.16% were above 81 yrs. In other cancers (tonsil, tongue, post cricoid, lung, prostate) 18.60% were in 41-60yrs, 13.95% were in 61-80 yrs, 10.47% were in 18-40 yrs, 0.00 were above 81 yrs.

## VII. Sex In Relation With Hads-A And Ham-A

22.62% of females and 10.71% of males were with abnormal scale. 8.14% of females and males were with severe anxiety.







## Sex in relation with HAM-A:

# Education In Relation With Hads-A And Ham-A

19.05% of uneducated and 14.29% of educated were with abnormal scale 10.47% of uneducated and 5.81% of educated were with severe anxiety.





Education in relation with HAM-A:

Treatment In Relation With Hads-A And Ham-A

## Treatment in relation with HADS-A:

Among the subjects who scored abnormal scale, 14.29% were undergoing radiotherapy similar to Marie-Christine Cordes et al study which showed the effects of radiotherapy on HADS-A,<sup>8</sup> 10.71% were undergoing chemotherapy, 3.57% were undergoing a combination of radiotherapy and chemotherapy, 4.76% were undergoing lumpectomy. P value = 0.638896 The values are not significant. Correlation= 0.051627, It is partially correlated and its correction is 0.



## Treatment in relation with HAM-A:

Among the subjects with severe anxiety, 10.47% were undergoing radiotherapy, 3.49% were undergoing chemotherapy, 1.16% were undergoing a combination of radiotherapy and chemotherapy, 1.16% were undergoing lumpectomy.



P value = 0.7744543 it is not significant and correlation = 0.031351, it is not correlated.

# VIII. Conclusion

From the study sample we can infer that anxiety increases with increasing age. The severity of anxiety was seen to increase gradually as age advances. Illiteracy and Age could be some of the factors causing anxiety. The age group 41-60yrs showed highest incidence in Breast, Cervix and Other cancers and also in HADS and HAM A scale. Most of the reported cases were females and showed abnormal scale in HADS and severe anxiety in HAM-A. Similarly, most of the reported cases were uneducated and showed abnormal scale in HADS and severe anxiety in HAM-A. A positive correlation was found between age and severity of anxiety (HAM-A). Advanced stage of the disease, repeated sessions with frequent intervals of the treatment , long duration of hospital stay, cost of the treatment, condition of the family, associated side effects of the treatment might have added up to the severity of anxiety. Among all the cases, those diagnosed with borderline anxiety were counseled and those with severe anxiety were referred to the Psychiatry department.

# IX. Limitations

As this was a cross sectional study we could not evaluate completely due to time constraints. As this was a hospital based study results are not applicable to the general population.

## Acknowledgement

**Statistician:** Sreeram Madhav has supported us in the statistical analysis and used all his sources in helping us achieving the targets and completing the task successfully. **Conflict Of Interest: No** 

Funds: Self

## References

- [1]. https://www.cancer.gov/about-cancer/coping/feelings/anxiety-distress-pdq
- [2]. American Society of Clinical Oncology (ASCO) Depression and Anxiety. 2012. available At: URL:http://www.cancer.net.
- [3]. Grassi L, Johansen C, Annunziata MA, et al. Screening for Distress in Cancer Patients: A Multicenter, Natonwide Study in Italy. Cancer. 2013;119:1714–21. [PubMed].
- $[4]. \qquad 4.https://www.cancer.org/treatment/treatments-and-side-effects/emotional-side-effects/anxiety-fear-depression.html$
- [5]. Michopoulos I, Douzenis A, Kalkavoura C, et al. Hospital Anxiety and Depression Scale (HADS): validation in a Greek general hospital sample. Ann Gen Psychiatry. 2008;7:4. [PMC free article] [PubMed]
- [6]. https://www.ncbi.nlm.nih.gov/pubmed/11053601 Anxiety and depression in cancer patients: relation between the Hospital Anxiety and Depression Scale and the European Organization for Research and Treatment of Cancer Core Quality of Life Questionnaire. Skarstein J et al.
- [7]. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2931030/ The Course of Anxiety and Depression in Patients with Breast Cancer and Gynaecological Cancer
- [8]. Reinhold Schwarz, et al.
- [9]. Distress, anxiety and depression in patients with brain metastases before and after radiotherapy, Marie-Christine Cordes,

\*Krishna Sahithi.J. "Screening And Assessment of Anxiety in Cancer Patients Attending Oncology Opd Of Kamsrc." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 16.10 (2017): 32-37